		view; and if you haven't got a cabin heat exchanger, I'm wondering just what you can do.
05 08 56 02	CC	He's thinking.
05 08 56 28	CC	Apollo 8, Houston. We think it'll still do a little bit of good so we'd just as soon go through with it.
05 08 56 39	LMP	Okay. Even bypassing the suit heat exchanger and that part of it too, huh?
05 08 56 44	CC	That's affirmative.
05 08 56 48	LMP	Okay.
05 08 56 49	CC	Also, Bill, your secondary loop is looking good.
05 08 56 54	LMP	Okay. We just had 5 minutes. I'll deactivate it now.
05 08 56 57	CC	Roger.
05 09 08 01	LMP	Houston, Apollo 8. Over.
05 09 08 04	CC	Apollo 8, Houston.
05 09 08 13	CC	Apollo 8, Houston. Go.
05 09 08 16	LMP	Hey, Jerry, when do you want to crank up the VHF, anyway?
05 09 08 26	CC	Roger. VHF Simplex - well, we had that on the checklist for about minus 4 hours.
05 09 08 37	LMP	Okay. We wanted - we wanted to put it out prior to MAX range, don't you think? Get an idea of when we're picking it up?
05 09 08 50	CC	Roger. Stand by, Bill. They're talking about it.

05 09 12 44	CC	Apollo 8, Houston.
05 09 12 47	CDR	Go ahead.
05 09 12 48	CC	Roger. Entry interface minus 4 hours is just about right for the VHF. That is about - oh, 142 GET.
05 09 13 03	CDR	Roger. Thank you.
05 09 13 11	CC	The next voice you hear will be that of the smiling Irishman.
05 09 13 20	CMP	Outstanding.
05 09 22 39	CC	Apollo 8, Houston. Over.
05 09 22 42	CMP	Go ahead.
05 09 22 43	CC	Good morning, James.
05 09 22 46	CMP	Oh, it's Michael Collins, is it? Good morning to you.
05 09 22 50	CC	Righto. And we're looking at your pitch CDU readout down here and looks to us like you are about 25 degrees off the 180 for your PTC, and we were just wondering how come?
05 09 23 03	CMP	We've been looking at that, too. It keeps wandering off in pitch for some reason more than yaw. I was just about ready to go back to it again. I had to go back one time, and I was just seeing how far she would drift. I thought it would drift out a ways and come back by itself, but it is not doing it.
05 09 23 18	CC	Okay.
05 09 23 21	CMP	We'll get back there.

05 09 32 11	CDR	Houston, Apollo 8. We're in the process of doing the trunnion bias check; then we will go to P23.
05 09 32 20	CC	Roger. Thank you, Frank.
05 09 33 07	CDR	Houston, Apollo 8.
05 09 33 11	CC	Apollo 8, Houston. Go.
05 09 33 13	CDR	We like to have the PTC attitude to comply with P23 requirement.
05 09 33 23	CC	Roger, Frank. Stand by.
05 09 34 09	CC	Apollo 8, Houston.
05 09 34 12	CDR	Go ahead.
05 09 34 13	CC	Any time you want to start on those P23's is just fine.
05 09 34 18	CDR	Okay. I was just checking. I just wanted to know how our thermal control was going before we left.
05 09 35 15	CC	Apollo 8, Houston. Over.
05 09 35 18	CDR	Go ahead, Houston. Apollo 8.
05 09 35 20	CC	Your temperatures are looking good, Frank. There is still a differential temperature between quads, but nothing that would cause us in the slightest to worry about doing P23.
05 09 35 31	CDR	Roger. Understand.
05 09 47 22	CC	Apollo 8, Houston. Over.
05 09 47 27	CMP	Go ahead.
05 09 47 28	CC	Roger, Jim. We've been looking at these stars that we gave you this time for P23. It looks

like the second star, number 11, has a trunnion angle right out to the limit, about 49.7 degrees. And we're thinking it might be a good idea to switch you over to star 1, which has a much smaller trunnion angle. What do you think? Star 1 is Alpheratz.

05 09 47 54	CMP	Fine with me; I would just as soon take star 1.
05 09 47 58	CC	Okay. That will be then in place of star 11, star 1, and in place of lunar far horizon, lunar near horizon; and it remains two sets. Over.
05 09 48 12	CMP	Roger. Star 1, lunar near horizon, two sets.
05 09 48 15	CC	Thank you.
05 10 13 24	CC	Apollo 8, Houston. Over.
05 10 13 55	CC	Apollo 8, Houston. Over.
05 10 13 59	CDR	Go ahead, Houston. Apollo 8.
05 10 14 01	CC	Roger. Fine. Old golden fingers there is getting so swift we missed some marks on the downlink. I wonder - if you hand recorded them, could you read us your three marks - trunnion angles, your three trunnion angles on star 2 and the last four trunnion angles on star 1. Over.
05 10 14 30	CDR	Do you read me still, Mike?
05 10 14 32	CC	Stand by. We're not reading you good enough, so we'll wait until you get a better OMNI.
05 10 14 38	CDR	That ought to be a good one.

05 10 14 40	CC	That is a good one. That's loud and clear.
05 10 14 43	CDR	Okay. Star 2 trunnion angle, first one 05245, second one 05243, next one 05241; last 4 trunnion angles 04133, 04133, 04132, 04132.
05 10 15 07	CC	Thank you kindly.
05 10 15 25	CDR	Can you give me some idea on the updates from the midcourse that we might need, and all that good stuff, Mike?
05 10 15 30	CC	Yes, sure can, Frank. Stand by.

END OF TAPE

05 10 17 55	CC	Apollo 8, Houston. Over.
05 10 17 58	CDR	Go ahead, Mike.
05 10 18 00	CC	Okay. We're predicting at the nominal time of your next midcourse, which is entry interface minus 2 hours - we're predicting 1.4 foot per second burn which changes your gamma at entry interface by a tenth of a degree. Right now with no further maneuvers, your gamma is minus 6.39degrees, and we're going to steepen it up very slightly to hit the center of the target line, and it will be after the maneuver minus 6.51. Over.
05 10 18 35	CDR	Very good.
05 10 18 38	CC	Anything else you want like that?
05 10 18 42	CDR	No. I just wondered - we hadn't heard whether we were going to do it or not and so on.
05 10 18 48	CC	Roger.
05 10 18 52	CDR	When we get the PAD data, we'll get it all out here.
05 10 18 58	CC	Yes. We'll be sending the PAD data up to you in about another 2 hours, Frank; about 132 hours GET.
05 10 19 06	CDR	Okay. We - this will be the last set of star sightings we do now nominally, and even if we lose COMM, we'll just come on in with what we got.
05 10 19 19	CC	Okay, Frank.

05 10 19 22	CDR	Incidentally, that COMM has been fantastic. I don't know how you've heard us, but boy, it's just like you are next door even in lunar distances.
05 10 19 31	CC	Yes. It has really been great with rare exceptions when you are on a bad OMNI right before you switch. Then we get an awful lot of background noise, but in general, it has been excellent, and boy, we are really thankful for it because reading all these updates would be bad news with bad COMM, as you know.
05 10 19 48	CDR	Right.
05 10 19 50	CMP	Say, Mike, have you noticed the confidence the Captain has in his navigator?
05 10 19 56	CC	He hasn't called you Goldfinger yet.
05 10 20 00	CMP	No. He is disregarding anything I can do. We're coming in anyway.
05 10 20 13	CC	I suspect he is right on that point.
05 10 20 18	CMP	Well, back to the drawing board.
05 10 20 21	CDR	As usual, we are all a little pooped. I've got Bill sleeping now, and then Jim and I will swap just as soon as we get through with these stars.
04 10 20 30	CC	Well, you're sounding real good, and you are doing good work.
05 10 20 34	CDR	Thank you.

05 10 56 40	CC	Apollo 8, Houston.
05 10 56 43	CDR	Go ahead, Houston. Apollo 8.
05 10 56 45	CC	Roger, Frank. If you get a chance to, we'd like for you to read us down your trunnion calibration number. We missed that one on the downlink, and we have an update for your passive thermal control attitude.
05 10 56 56	CDR	Okay. The trunnion calibrations were all zeros.
05 10 57 00	CC	Roger. Thank you, and on page 2-104 the PTC attitudes should read zero pitch and 45 degrees yaw. Over.
05 10 57 14	CDR	Zero pitch and 45 degrees at 2-104.
05 10 57 17	CC	Roger. And we'd like some PRD readings for those of you who are up and around.
05 10 57 57	CDR	Zero pitch, 45 yaw, it is?
05 10 58 01	CC	Roger. Thank you.
05 10 58 07	CDR	I'm asking. I wasn't sure I copied it right.
05 10 58 10	CC	Yes. That's affirmative, Frank. Zero pitch, 45 degrees yaw.
05 10 58 15	CDR	My PRD now reads 2.85.
05 10 58 21	CC	2.85.
05 11 33 39	CC	Apollo 8, Houston. Radio check. Over.
05 11 33 45	CMP	This is 8. Loud and clear. How us?
05 11 33 47	CC	Roger. You're loud and clear, Jim. We'd like to get your PRD reading while we've got you up and a flight plan change we're suggesting on page 2-107 when you're ready to copy.

05 11 34 03	CMP	Roger. Stand by.
05 11 34 12	CMP	I'm the only person up, and my PRD is reading 0.15.
05 11 34 18	CC	Roger. I understand; 0.15.
05 11 34 22	CMP	And I'll bet that Bill's is still reading 0.64.
05 11 34 27	CC	That's okay; don't bother him with it. He's asleep.
05 11 34 48	CMP	Okay. Go ahead with your flight plan change.
05 11 35 11	CMP	Houston, Apollo 8. Go ahead with your flight plan change.
05 11 35 14	CC	Okay, Jim. On page 2-107, we're recommending that you delete that P52 and just stay in PTC attitude. Your platform is real good, and we don't feel that alignment's necessary. One is coming up again at 139 hours anyway. And also, on that same page, we'd like to delete the "begin cabin cold soak." Over.
05 11 35 44	CMP	Righto. Will delete the "begin cabin cold soak," and we'll delete the P52.
05 11 35 49	CC	Okay. Thank you.

END OF TAPE

05 12 04 57	CMP	Houston, Apollo 8. Over.
05 12 04 59	CC	Roger, Apollo 8. This is Houston. Over.
05 12 05 03	CMP	Roger. Mike. Are you still planning to send up these updates at 132 hours?
05 12 05 08	CC	Yes; affirmative, Jim. We're getting them together now.
05 12 05 13	CMP	Roger.
05 12 06 06	CC	Apollo 8, this is Houston. Would you please go to POO and ACCEPT, Jim, and we'll send you a P27.
05 12 06 27	CMP	We're ready for you.
05 12 06 29	CC	Okay. Sending up a state vector to LM slot.
05 12 06 35	CMP	Roger.
05 12 10 03	CC	Apollo 8, this is Houston. Over.
05 12 10 07	CMP	Go ahead, Houston.
05 12 10 08	CC	Roger, Jim. You can go back to BLOCK; we got the P27 in and verified. It was a state vector update to the LM slot, and I'm standing by for the midcourse correction number 7 and the entry PAD at your convenience. Over.
05 12 10 27	CMP	Roger. Stand by.
05 12 10 50	CMP	Go ahead with midcourse number 7.
05 12 10 52	CC	Okay. Midcourse correction number 7, RCS/G&N: 31600, not applicable, not applicable, 14445 5799, minus 00014, plus five zeros, plus 00001. Are you with me so far? Over.
05 12 11 49	CMP	Roger. With you.

05 12 11 51	CC	Good. 000 304 000, not applicable, 000 191 00014 004 00014 450 - -
04 12 12 38	CMP	Hey, Mike, hold it. Hold it, Mike.
05 12 12 39	CC	Okay. Holding.
05 12 12 45	CMP	You said not applicable for HA and HP; I started to copy it down, and then I didn't get the right number sequence. Did you skip down to what, V_T?
05 12 13 04	CC	No. Let's go back to apogee is not applicable, and then I just started reading the numbers again. From there, I've got a perigee and then a DELTA-V_T and then a burn time and so forth. Over.
05 12 13 15	CMP	Okay. I didn't hear a plus or minus on the HP, and I only got four numbers off of it. So could you start with HP again?
05 12 13 22	CC	Okay. Going back to apogee, not applicable; perigee, plus 00191. And you weren't hearing things; it was my mistake. Over.
05 12 13 39	CMP	Roger.
05 12 13 43	CC	Okay. Picking up with DELTA-V_T 00014 004 00014 45 0459 225, Shaula, up 236 000, plus 0813 minus 16503 12202 36301 146 4641; north set of stars, Sirius and Rigel, roll 308, pitch 209, yaw 357; remarks: perigee in P30 equals plus 22.2 nautical miles. Over.

05 12 16 04	CMP	Roger. Midcourse number 7 RCS/G&N: 31600, not applicable, not applicable, 14445 5799. Are you with me?
05 12 16 17	CC	I'm with you.
05 12 16 20	CMP	Minus 00014, plus all zeros, plus 00001 000 304 000, not applicable, plus 00191 00014 004 00014 45 0459 225 Shaula, up 236 000, plus 0813, minus 16503 12202 36301 146 4641, Sirius, Rigel, 308 209 357, HP, and P30 is 22.2 nautical miles.
05 12 17 24	CC	That's all correct, Jim, and I have the entry PAD at your convenience.
05 12 17 32	CMP	Roger. Stand by one.
05 12 17 50	CMP	Ready to copy. Mike.
05 12 17 52	CC	Okay. Entry PAD: area mid-Pacific, 357 152 359 146 29 13 268, plus 0813, minus 16503 068 36221 651 12202 36301 146 46 13 0028, not applicable four times, in other words, DL MAX, DL MIN, VL MAX, and VL MIN - all not applicable. Starting with TO: 400 0207 0025 0333 0816 16 0590 312. And your vortex star is Zeta Persei, which is half way between Mirfak and Aldebaran, up 165, right 34 up. Remarks: use nonexit EMS pattern. Over.
05 12 21 09	CMP	Right, Mike. Stand by.
05 12 21 13	CMP	Entry as follows: mid-Pacific, 357 152 359 146 2913 268, plus 0813, minus 165 03 068 36221

651 12202 36301 146 4613 0028, NA 4 times, with TO 400 0207 0025 0333 0816 16 0590 312, Zeta Persei, up 165, right 34, up. And remarks: use nonexit EMS pattern. And Zeta Persei is between Mirfak and Aldebaran, and Frank can never find it anyway.

05 12 22 25	CC	Okay. That's all correct.
05 12 23 13	CMP	We certainly don't waste much time getting down to drogue deploy, do we?
05 12 23 19	CC	Roger. That's - that's true.
05 12 34 41	CC	Apollo 8, Houston. Over.
05 12 34 43	CMP	Go ahead, Houston.
05 12 34 45	CC	Roger, Jim. In your computer, we'd like to do an erasable memory dump again, like we did the other day, and the reason we'd like to do it is, when you did that P37 about 8 hours ago, and you remember you put that EI time for TIG and got that POO do thing; we'd like to - We don't think there's anything in the world wrong with it. We think everything is just perfect inside the computer, but we'd like to do an erasable dump as we did the other day; go through it bit by bit. Give us something to do down here. Over.
05 12 35 23	CMP	Okay. Any time.

05 12 35 26	CC	And I have the procedures for you when you're ready to copy.
05 12 35 32	CMP	Go ahead.
05 12 35 33	CC	Okay. VERB 01 NOUN 01 ENTER, 333 ENTER, and then read out register 1, and that register 1 should be 10 000. And then if it's not, I can give you procedures for getting it to 10 000. If it is 10 000 as we expect, then VERB 74 ENTER, and that will do the dump. Over.
05 12 36 10	CMP	Roger. When do you want it?
05 12 36 22	CC	And, Apollo 8, you can do the first part of that now at your convenience to verify that register 1 is reading 10 000, but would you hold up on the dump itself until we get our ground stations configured, please. Over.
05 12 36 38	CMP	Will do.
05 12 38 37	CC	Jim, we're getting noisy down here. Could you switch OMNI antennas, please?
05 12 38 50	CC	Thank you, sir.
05 12 38 57	CC	That works pretty well, doesn't it?
05 12 39 01	CMP	Not bad. I was amazed at the communication at the moon, too.
05 12 39 13	CC	Apollo 8, Houston. We're configured for the dump. VERB 74 ENTER at your convenience.
05 12 39 19	CMP	Roger.
05 12 40 34	CC	Apollo 8, Houston. The dump is complete, and it's your computer. Thank you.

05 12 40 39	CMP	Roger.
05 13 06 33	LMP	Houston, Apollo 8. Over.
05 13 06 38	CC	Apollo 8, Houston.
05 13 06 48	CC	Apollo 8, this is Houston. Over.
05 13 06 56	LMP	Good morning, Mike. We had a little change of the guard here.
05 13 07 00	CC	You sound real bright eyed and bushy tailed. How's it going up there?
05 13 07 04	LMP	Real great.
05 13 07 44	CC	Apollo 8, Houston. How about giving us a count-down to PRD reading. Over?
05 13 07 52	LMP	Just mine?
05 13 07 55	CC	Just on you, Bill. We got the other two while you were sacked out.
05 13 08 04	LMP	The one that I have now, and the one that Jim took off, which is obviously broken, it's still at 0.64.
05 13 08 10	CC	Okay. Thank you.
05 13 11 38	CC	Apollo 8, Houston. Over.
05 13 11 45	CC	Roger, Bill. On your PTC attitude, we're requesting a pitch angle zero, and we're showing you about 27 degrees pitch and increasing. Over.
05 13 11 56	LMP	Roger. I've been trying to work it down to ENTER again.
05 13 12 00	CC	They're letting you drive, after all?
05 13 12 06	LMP	I have to every now and then just to square this thing away.

05 13 13 28	LMP	Mike, I'll just give you my status here before the rest of them go to sleep; had about 3 hours sleep, another meal, and everybody's doing fine.
05 13 13 41	CC	Roger, Bill. Thank you.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

(GOSS NET 1)

05 13 49 11	CC	Apollo 8, Houston. Radio check. Over.
05 13 49 16	LMP	Loud and clear.
05 13 49 19	CC	Roger. Thanks, Bill.
05 14 36 50	CC	Apollo 8, Houston.
05 14 37 04	CC	Apollo 8, Houston. Over.
05 14 37 26	CC	Apollo 8, this is Houston. Over.
05 14 37 59	CC	Apollo 8, this is Houston. Over.
05 14 38 02	LMP	Roger, Mike. How do you read?
05 14 38 04	CC	I read you loud and clear now, Bill. I wasn't hearing here for a couple of calls. How do you read me?
05 14 38 09	LMP	I had my hands full; I was putting something down. I read you fine.
05 14 38 13	CC	Okay. Understand. If it'll be any help to you in your PTC driving, we've computed that as you look out plus X in the COAS or just out the window, you should be pointed right at Acrux when you're in a perfect PTC attitude. We don't know if that's a help to you or not, but we thought you might enjoy trying an alternate mode of keeping the attitude under control.
05 14 38 40	LMP	Okay. From my present position, we're going to have to move Acrux a little bit.
05 14 38 50	CC	Well, whatever you think. We just thought you might appreciate knowing.
05 14 39 03	LMP	I'll give it a try, Mike.

05 14 39 07	CC	Can you see it all right?
05 14 39 09	LMP	Yes, I think so. There's a star out there anyway.
05 14 40 58	LMP	Houston, Apollo 8. Do you read?
05 14 40 59	CC	Go ahead, Bill.
05 14 41 02	LMP	Actually, Mike, it's so easy to do it with the eight-ball within a reasonable sloppy limit that it's hardly worth the trouble to scootch way up in the seat to look out the COAS, and it's enough light in the cockpit where the star really isn't too easy to see. So I'm kind of inclined to use the IFR technique here where you can see the rest of the instrument panel.
05 14 41 27	CC	Okay.
05 14 41 41	LMP	I thought you were an all-weather pilot.
05 14 41 44	CC	Well now, you just caused Flight down here to get a "Got Ya" on CAP COMM and FAO.
05 14 41 59	LMP	Give you a little warning next time.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

(GOSS NET 1)

05 15 07 08	CC	Apollo 8, Houston. Could you give us a better OMNI, please?
05 15 07 26	CC	Apollo 8, Houston. We will be changing the antennas in 3 minutes. You can expect a COMM glitch. Over.
05 15 07 34	LMP	Okay, Mike.
05 15 21 10	CC	Apollo 8, Houston. Can you switch us to OMNI Charlie, please.
05 15 21 24	CC	Thank you, sir.
05 15 21 28	LMP	De nada.
05 16 01 21	LMP	Houston, Apollo 8.
05 16 01 30	LMP	Houston, Apollo 8. Are you still there?
05 16 01 33	CC	Apollo 8, this is Houston. Go ahead. Over.
05 16 01 38	LMP	I was just seeing if you were still there, Mike. The Old Grey Eagle is taking over the show from here.
05 16 01 47	CC	Which one of them?
05 16 01 53	LMP	Old Super Chief.
05 16 03 18	CC	Apollo 8, Houston. Over.
05 16 03 23	LMP	Go ahead, Houston.
05 16 03 25	CC	Roger, Bill. We had an erasable memory dump a few hours back. I think it was while you were asleep, but anyway we've checked the computer's erasable memory bit by bit, and everything agrees 100 percent. Over.
05 16 03 40	LMP	Mighty fine. Glad to hear it, Mike. Thank you.

05 16 03 44	CC	Roger. Are you going to brief Frank on your tape recorder before you go to sleep?
05 16 03 54	IMF	He can't handle it. It's to complicated.
05 16 03 58	CC	Roger.
05 16 13 25	CC	Apollo 8, Houston. Give us a different OMNI, please.
05 16 13 38	CC	Thank you, sir.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

(GOSS NET 1)

05 16 34 23	CC	Apollo 8, Houston. Over.
05 16 34 38	CC	Apollo 8, this is Houston. Over.
05 16 34 42	CDR	Go ahead, Michael.
05 16 34 43	CC	Roger. We are going to switch our ground antennas in about a minute and a half. You can expect a COMM glitch then.
05 16 34 51	CDR	Thank you.
05 16 35 47	CDR	..., Mike.
05 16 37 09	CC	Apollo 8, this is Houston through Carnarvon. Were you calling a minute ago, Frank?
05 16 37 17	CDR	Y'all in Australia, do you hear us?
05 16 37 21	CC	Yes, we are reading you loud and clear now.
05 16 38 03	CDR	Carnarvon, how do you read? Apollo 8.
05 16 38 06	CC	Apollo 8, this is Houston. Reading you loud and clear through Carnarvon.
05 16 38 54	CDR	Hello, Houston.
05 16 38 57	CC	Go ahead, Frank.
05 16 38 59	CDR	We are just listening to all the guys around the NET.
05 16 39 02	CC	Can you hear them?
05 16 39 05	CDR	I could that time, all the way from Carnarvon to Texas.
05 16 39 18	CDR	How did they ever get an old maintenance officer on the midnight shift?
05 16 40 15	CC	Frank, you are on GOSS Conference if you would like to be brave. Over.

05 16 40 21	CDR	Okay.
05 16 50 47	CC	Apollo 8, Houston. OMNI Bravo, please.
05 16 51 11	CC	Thank you, sir.
05 17 11 48	CDR	Houston, Apollo 8.
05 17 11 56	CC	Apollo 8, this is Houston. Over.
05 17 12 09	CC	Apollo 8, this is Houston. Over.
05 17 12 13	CDR	Have you noticed how long I've stayed locked in this PTC mode?
05 17 12 34	CC	Just about an hour and a quarter looks to us like, Frank.
05 17 12 38	CDR	I haven't even touched the hand control here for about 20 minutes, and it just hasn't moved outside that zero; I've never see it like this before.
05 17 12 55	CDR	Be sure and have your troops give me a call if it gets close to gimbal lock, will you? I'm snoozing a little bit now and then up here.
05 17 13 01	CC	Yes, we sure will, Frank.
05 17 13 05	CDR	Thank you.
05 17 13 13	CDR	And if you'd switch the antennas, you'd really be good guys.

END OF TAPE

APOLLO 8 AIR-TO-GROUND VOICE TRANSCRIPTION

(GOSS NET 1)

05 18 18 46	CC	Apollo 8, Houston.
05 18 19 12	CC	Apollo 8, this is Houston. Over.
05 18 19 27	LMP	Houston, Apollo 8.
05 18 19 30	CC	Roger. Just a check on the radio, and if it's practical, BIOMED switch left, please.
05 18 19 38	LMP	Okay, Mike. We had a crew change in the watch again.
05 18 19 44	CC	Well, that was quick. Did you decide you didn't want to sleep after all?
05 18 19 52	LMP	Well, it wasn't my decision.
05 18 19 59	CC	Yes, that's what I figured.
05 18 21 28	CC	Apollo 8, Houston. We will be changing antennas in about 2-1/2 minutes; you can expect a COMM glitch.
05 18 21 36	LMP	Roger. What are you changing to?
05 18 21 43	CC	We're switching from Carnarvon to Honeysuckle, Bill.
05 18 21 50	LMP	Roger.
05 19 08 18	CC	Apollo 8, Houston. Over.
05 19 08 24	LMP	Go ahead, Houston.
05 19 08 26	CC	Roger, Apollo 8. Your Green Team will be signing off in a few minutes, and before we do, Charlesworth and the rest of us would like to say we have enjoyed it and look forward to seeing you back in Houston. Over.
05 19 08 40	LMP	We have sure enjoyed it, too, troops, and you guys have really done a good job. We really do appreciate it.

05 19 08 45	CC	Well, nice words there. We will be seeing you, Bill.
05 19 08 47	LMP	Okay, Mike. We will see you, Buddy. Tell old Cliff adios for me, too.
05 19 08 57	CC	Sure will.
05 19 19 04	CC	Apollo 8, Houston.
05 19 19 11	LMP	Go ahead, Houston.
05 19 19 13	CC	Apollo 8, we'd like to have you, before you get in a P52 going here, we'd like to have you rezero the optics and read us the mechanical CDU's. We're trying to collect a little data for trouble-shooting.
05 19 19 29	LMP	Roger. Stand by.
05 19 19 31	CC	Thank you.
05 19 19 45	LMP	What's the trouble you are trying to troubleshoot?
05 19 19 51	CC	This goes back to some of the problems we had prior to LOI; trying to see if the softwear readouts we're getting down here compare with the mechanical readouts. It's not a current problem as far as we know.
05 19 20 08	LMP	Okay.
05 19 21 27	CC	Apollo 8, Houston.
05 19 21 31	LMP	Go ahead, Houston.
05 19 21 33	CC	Okay. Why don't you just read me the mechanical CDU's there now, and then it looks from the ground like you're clear to go ahead with the P52.